

I claim:

1. An article breaking apparatus for being mounted on an arm of a vehicle, and comprising:

(a) a first member having a first jaw on a first end thereof and a mounting attachment on a second end remote from the first jaw for permitting the apparatus to be mounted onto the vehicle arm, the first jaw including an article-supporting surface;

(b) a second member pivotally mounted for movement about a first pivot axis, the second member including a second jaw having an article-engaging surface cooperable with the article-supporting surface of the first jaw and defining an article receiving opening therebetween;

(c) the second jaw being movable about the first pivot axis relative to the first jaw between an article receiving position in which the article-supporting surface of the first jaw and the article-engaging surface of the second jaw diverge away from the first pivot axis and an article breaking position in which the article-supporting and article-engaging surfaces diverge toward the first pivot axis;

(d) wherein the article-supporting surface of the first jaw is inclined relative to the first pivot axis, whereby, as the first and second jaws move from the article receiving position to the article breaking position, an article located between the first and second jaws will move along the article-supporting surface of the first jaw towards the first pivot axis by the movement of the second jaw against the article relative to the first jaw; and

(e) power means mounted for cooperation with the first and second members for moving the second jaw relative to the first jaw.

2. An article breaking apparatus according to claim 1, wherein said power means comprises a piston and cylinder assembly.

3. An article breaking apparatus according to 2, wherein the piston and cylinder assembly is hydraulically driven by a hydraulic compressor of a vehicle to which the apparatus is attached in use.

4. An article breaking apparatus according to claim 1, wherein the article engaging surface includes a blade.

5. An article breaking apparatus according to 1, wherein the apparatus is adapted to break railway rails, said article comprises a railway rail, and the length of the first jaw and the second jaw is less than the height of the rail being broken whereby the article-engaging surface engages less than the entire height of the rail as the first and second jaws move from the receiving position to the breaking position.

6. An article breaking apparatus according to claim 1, wherein said first jaw includes a second article-supporting surface forward of said article-supporting surface positioned

at an oblique angle thereto for guiding an article into the area between the first jaw and the second jaw.

7. An article breaking apparatus according to 1, wherein said mounting attachment includes an attachment pivot mounting having an axis of rotation perpendicular to the axis of rotation of the first pivot axis for permitting rotation of the article breaking apparatus about an axis perpendicular to the axis of rotation of the first pivot axis.

8. An article breaking apparatus according to claim 1 in combination with a vehicle having an articulating arm to which the apparatus is attached.

9. An article breaking apparatus according to claim 8, wherein the axis of rotation of the attachment pivot mounting is aligned with the axis of rotation of the perpendicular first pivot axis of the second member for maintaining the first and second jaws in the same position to the article as the apparatus is pivoted about the axis of rotation of the attachment pivot.

10. A method of breaking an article, comprising the steps of:

(a) providing:

(i) a first member having a first jaw on a first end thereof and a mounting attachment on a second end remote from the first jaw for permitting the apparatus to be mounted onto the vehicle arm, the first jaw including an article-supporting surface;

(ii) a second member pivotally mounted for movement about a first pivot axis, the second member including a second jaw having an article-engaging surface cooperable with the article-supporting surface of the first jaw;

(iii) the second jaw being movable about the first pivot axis relative to the first jaw between an article receiving position in which the article-supporting surface of the first jaw and the article-engaging surface of the second jaw diverge away from the first pivot axis and an article breaking position in which the article-supporting and article-engaging surfaces diverge toward the first pivot axis;

(iv) wherein the article-supporting surface of the first jaw is inclined relative to the first pivot axis, whereby, as the first and second jaws move from the article receiving position to the article breaking position, an article located between the first and second jaws will move along the article-supporting surface of the first jaw towards the first pivot axis by the movement of the second jaw against the article relative to the first jaw; and

(v) power means mounted for cooperation with the first and second members for moving the second jaw relative to the first jaw;

(b) positioning the first and second jaws in the article receiving position;

(c) orienting the apparatus with respect to the article so that the article extends through the article receiving opening defined by the first and second jaws;

(d) moving the first and second jaws from the article receiving position into the article breaking position and breaking the article; and

(e) repeating steps (b) through (d).

11. A method according to claim 10, wherein the article comprises a railway rail.

12. A method according to claim 10, wherein the article comprises a railway rail in situ on a railway bed.

13. A method according to claim 10, wherein the article comprises a railway rail in situ on a railway bed, and the step of positioning the first and second jaws in the article receiving position comprises the steps mounting the apparatus on a railway truck alongside the railway bed.

14. An apparatus for breaking railway rails, comprising:

(a) a first member having a first jaw on a first end thereof and a mounting attachment on a second end remote from the first jaw for permitting the apparatus to be mounted onto an arm, the first jaw including a rail-supporting surface;

(b) a second member pivotally mounted for movement about a first pivot axis, the second member including a second jaw having a rail-engaging surface cooperable with the rail-supporting surface of the first jaw and defining a rail receiving opening therebetween;

(c) the second jaw being movable about the first pivot axis relative to the first jaw between a rail receiving position in which the rail-supporting surface of the first jaw and the

rail-engaging surface of the second jaw diverge away from the first pivot axis and a rail breaking position in which the rail-supporting and rail-engaging surfaces diverge toward the first pivot axis;

(d) wherein the rail-supporting surface of the first jaw is inclined relative to the first pivot axis, whereby, as the first and second jaws move from the rail receiving position to the rail breaking position, a rail located between the first and second jaws will move along the rail-supporting surface of the first jaw towards the first pivot axis by the movement of the second jaw against the rail relative to the first jaw; and

(e) power means mounted for cooperation with the first and second members for moving the second jaw relative to the first jaw.

15. An article breaking apparatus according to claim 14, wherein the rail-supporting surface of the first jaw comprises two surface segments, a first distal segment for initially engaging a rail and guiding it into the jaw opening and a second proximal segment oblique to the first distal segment for engaging and urging the rail further into the opening between the first and second jaws and against the second jaw as the first and second jaws are moving relatively towards each other from the rail receiving position into the rail breaking position.

16. An article breaking apparatus according to 14, wherein the apparatus is mounted on a vehicle.